The rains at Kidder, Mo., and Horton, Kans., show important local development.

DAMAGE CAUSED.

The damage caused in this community by the heavy rain was enormous, being estimated at $1,500,000. It happened chiefly from the approach of the Southwest Boulevard to the West Bottoms through Rosedale, Kans., and the valley of Turkey Creek, a small branch having its source in numerous gullies in Johnson County, Kans., about 30 miles to the west by south of Kansas City. The creek follows a tortuous course through a valley one-fourth to one-half mile in width, bordered by steep hills, and empties into the Kansas River at Nineteenth Street and the State line (in the West Bottoms).

The drainage area of the valley is about 22 square miles. The creek is 12 to 15 feet wide. Nature never intended that such a watercourse should carry off the storm water from that valley. Every extraordinary rain caused an overflow, which ran out with much greater freedom in former years than at present. Commercial necessity, or avarice, has not only claimed part of the original small creek bed, but has actually bridged the stream in several places with buildings; and there are many plank bridges. All of those obstructions held the water back, and as a consequence the flood extended from hillside to hillside.

In the central depression, in which is located the Frisco; Atcheson, Topeka & Santa Fe; and Missouri, Kansas & Texas railroad tracks; and other small industrial plants, the water was 12 feet deep and more. After the water receded the district presented a deplorable appearance. The wreckage of houses, animals, and drift was piled up in great masses, and black, slimy mud was 2 to 3 feet deep in the streets and buildings through which the water ran. The flood carried away the contents of the lumber yard, overturned heavy freight and passenger cars, destroyed long stretches of the railroad tracks, and many of the smaller buildings and manufacturing plants. About 2,000 buildings were damaged and 200 families were left homeless, and 3 lives were lost as a result of the flood. On the Kansas side the damage was about $150,000 to residences and business property and the loss to railroads about $350,000.

EXCESSIVE RAINFALL AT CAMBRIDGE, OHIO, JULY 16, 1914.

On July 16, 1914, 7.09 inches of rain fell at Cambridge, Guernsey County, Ohio, in 1½ hours. It is reported that the rainfall was very local and did not cover an area over 5 miles square. The damage to roads and bridges in the storm area was probably more than $2,500, not including the loss to fields, fences, and farm crops.

MEAN LAKE LEVELS DURING SEPTEMBER, 1914.

By UNITED STATES LAKE SURVEY.

[Dated Detroit, Mich., Oct. 2, 1914.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during September, 1914:	*Feet.*	*Feet.*	*Feet.*	*Feet.*
Above mean sea level at New York	602.80	580.48	572.37	246.09
Above or below—				
Mean stage of August, 1914	+0.04	−0.16	−0.22	−0.24
Mean stage of September, 1913	−0.03	−0.45	−0.38	−0.65
Average stage for September last 10 years	+0.07	−0.41	−0.07	−0.25
Highest recorded September stage	−1.28	−2.95	−1.57	−1.52
Lowest recorded September stage	+1.31	+0.82	+1.09	+2.09
Probable change during October, 1914	0.0	−0.2	−0.3	−0.3

Below are given the mean lake levels for March and April of the current year. These reports seem to have been lost in the mails when first mailed to this bureau.

MEAN LAKE LEVELS DURING MARCH, 1914.

By UNITED STATES LAKE SURVEY.

[Dated Detroit, Mich., Apr. 2, 1914.]

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during March, 1914:	*Feet.*	*Feet.*	*Feet.*	*Feet.*
Above mean sea level at New York	601.91	580.00	571.46	245.67
Above or below—				
Mean stage of February, 1914	−0.27	−0.06	−0.27	−0.20
Mean stage of March, 1913	+0.40	−0.10	−0.99	−1.04
Average stage for March last 10 years	+0.25	−0.14	−0.34	−0.22
Highest recorded March stage	−0.37	−2.95	−2.39	−2.14
Lowest recorded March stage	+1.25	+0.89	+0.63	+1.37
Probable change during April, 1914	0.0	+0.3	+0.7	+0.6

MEAN LAKE LEVELS DURING APRIL, 1914.

By UNITED STATES LAKE SURVEY.

[Dated Detroit, Mich., May 4, 1914.]

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during April, 1914:	*Feet.*	*Feet.*	*Feet.*	*Feet.*
Above mean sea level at New York	601.83	580.06	572.10	246.75
Above or below—				
Mean stage of March, 1914	−0.08	+0.06	+0.64	+0.08
Mean stage of April, 1913	+0.19	−0.72	−1.93	−1.11
Average stage for April last 10 years	+0.16	−0.39	−0.42	+0.25
Highest recorded April stage	−0.86	−3.17	−2.08	−1.68
Lowest recorded April stage	+1.29	+0.84	+0.84	+1.91
Probable change during May, 1914	+0.3	+0.3	+0.3	+0.5